## 1. The Application

Only complete applications will be processed. Incomplete applications will be returned. The Division of Professional Licensure or PSI will not act as your agent in gathering information for this application. It is your responsibility to obtain all necessary information and signatures.

#### 2. Photograph

Include a head and shoulders photograph (passport type) taken within one year of the date of the submission of your application.

#### 3. Qualifications

Requirements listed below are taken from 237 CMR. Publication available at the state house book store or on the Board website www.mass.gov/reg/boards/el

## Journeyman:

- 8000hrs in 4yrs for light heat and power purposes
- 600 hrs Board approved education pursuant to 237 CMR 22.02 (within 10yrs of app)

(300hrs (within 10yrs of app) with proof of trade entry prior to 7/1/01)

# Out-of-State/foreign resident

- Work experience documented on company letterhead showing dates employed, hours accumulated and work capacity
- Education documented as a certificate of completion in compliance with CMR 22.01 accompanied with a transcript of course showing hours accumulated

## **Exception with Out-of-State license**

 Certified documentation of licensure by the issuing authority for waiver of 600/300 hrs education requirement

## Master:

- 1 year as a licensed Mass Journeyman
- 150 hrs Board approved education pursuant to 237 CMR 22.02

#### **Exception with Out-of-State license**

 Certified documentation of Master license by the issuing authority for waiver of 150 hrs education requirement

# **Systems Technician:**

• 6000hrs in 3yrs for fire warning and security systems installation purposes

(4000hrs in 2yrs experience with proof of trade entry prior to 7/1/01)

200 hrs Board approved education pursuant to 237 CMR
 22.03 (within 10yrs of app)

# Out-of-State/foreign resident

- Work experience documented on company letterhead showing dates employed, hours accumulated and work capacity
- Education documented as a certificate of completion in compliance with CMR 22.03 accompanied with a transcript of course showing hours accumulated

## **Exception with Out-of-State license**

 Certified documentation of licensure by the issuing authority for waiver of 200 hrs education requirement

## **Systems Contractor:**

- 1 year as licensed Mass Systems Tech
- 75 hrs Board approved education pursuant to 237 CMR 22.04

## **Exception with Out-of-State license**

 Certified documentation of Systems Contractor license by the issuing authority for waiver of 75 hrs education requirement

## 4. Verification of Practical Experience

## Journeyman Electrician:

Applicants must have 8000 hours of practical experience, in no less than 4-years. Part of this requirement can be satisfied by Shop and/or Co-op work time while at a daytime vocational school. (The time allowed varies with each vocational school.) See 237 CMR 13.02

Use "Employment verification form" for each employer to verify your 8000 hours of work experience and, if it applies to you, use the "Certificate of school experience" for daytime vocational school experience.

Work performed under an Electrical Engineer does not qualify as work performed under a licensed electrician.

#### **Systems Technician:**

Applicants must have 6000 hours of practical experience, in no less than 3-years. Part of this requirement can be satisfied by Shop and/or Co-op work time while at a daytime vocational school. (The time allowed varies with each vocational school.) See 237CMR section13.04

Use "Employment verification form" to verify your 6000 hours of work experience and, if it applies to you, use "Certificate of school experience" for vocational school experience.

## 5. Certification of School

## Journeyman Electrician:

Daytime vocational education must be documented on the "Certificate of school experience". If you did not attend daytime vocational school, use your evening certificates, which must show the hours of classroom time completed.

#### **Master:**

In addition to being a Journeyman Electrician for at least one year, applicants must complete 150 hours of advanced theory course work. Please submit a certificate of completion with your application, which must show the hours of classroom time completed.

#### 6. Military Experience

## **APPLICATION INSTRUCTIONS**

Applicants who have electrical experience in the Armed Services shall submit breakdown of experience on discharge papers forms DD214 and DD215. Documentation must include a paragraph stating that the individual has worked as (indicate the title of the position) doing (indicate the specific work assignment) with dates and hours accumulated.

**Aircraft Electricians** (AEM) may receive **3 months** maximum experience including school time in the military.

**Shipboard Electricians** (EM) may receive a maximum of **6 months** experience including military education.

Naval Seabees involved as Construction Electricians (CE) and those in army construction battalions, base maintenance or marine engineering may receive 50% credit on their time up to 2 years.

# 7. <u>Veteran Qualification</u>

Pursuant to M.G.L. c. 4, §. 7, Clause Forth-third, "Veteran" shall mean any person -male or female- including a nurse, (a) whose last discharge or release from his wartime service -as defined herein- was under honorable conditions and who (b) served in the army, navy, marine corps, coast guard, or air force of the United States for not less than ninety days active service. At least one day of which was for wartime service. Provided, that any person who so served in wartime and was awarded a service-disconnected disability or a Purple Heart, or who died in such service under conditions other than dishonorable, shall be deemed to be a veteran notwithstanding his failure to complete ninety days of active service.

(e) "Armed forces" shall include army, navy, marine corps, air force and coast guard.

"Active service in the armed forces", as used in this clause shall not include active duty for training in the army national guard or air national guard or active duty for training as a reservist in the armed forces of the United States.

"Wartime service" shall mean service performed by a
"Spanish War veteran", a "World War I veteran", a "World
War II veteran", a "Korean veteran", a "Vietnam veteran",
a "Lebanese peace keeping force veteran", a "Grenada
rescue mission veteran", a "Panamanian intervention force
veteran", a "Persian Gulf veteran", or a member of the
"WAAC" as defined in this clause during any of the periods of
time described herein or for which such medals described
below are awarded.

"Spanish War veteran" shall mean any veteran who (a) performed such wartime service between February fifteenth, eighteen hundred and ninety-eight (2/15/1898) and July fourth, nineteen hundred and two (7/4/1902).

"World War I veteran" shall mean any veteran who (a) performed such wartime service between April sixth, nineteen hundred and seventeen (4/6/1917), November eleventh, nineteen hundred and eighteen (11/11/1918). Or (c) performed such service between March twenty-fifth, nineteen hundred and seventeen (3/25/1917) and August fifth, nineteen hundred and seventeen (8/5/1917), as a Massachusetts National Guardsman.

"World War II veteran" shall mean any veteran who performed such wartime service between September sixteenth, nineteen hundred and forty-six (9/16/1946). Except that for the purposes of chapter thirty-one it shall mean all active service between the dates of September sixteenth, nineteen hundred and forty (9/16/1940) and June twenty-fifth, nineteen hundred and fifty (6/25/1950).

**"Korean veteran"** shall mean any veteran who performed such wartime service between June twenty-fifth, nineteen hundred and fifty (6/25/1950) and January thirty-first, nineteen hundred and fifty-five (1/31/1955), both dates inclusive.

"Korean emergency" shall mean the prior between June twenty-fifth, nineteen hundred and fifty (6/25/1950), and January thirty-first, nineteen hundred and fifty-five (1/31/1955), both dates inclusive.

"Vietnam veteran" shall mean (1) any person who performed such wartime service during the period commencing August fifth, nineteen hundred and sixty-four (8/5/1964) and ending on May seventh, nineteen hundred and seventy-five (5/7/1975), both dates inclusive, or (2) any person who served at least one hundred and eighty days of active service in the armed forces of the United States during the period between February first, nineteen hundred and fifty -five (2/1/1955) and August fourth, nineteen hundred and sixty-four (8/4/1964); provided however, that for the purpose of the application of the provisions of chapter thirty-one, it shall also include all active service between the dates of May seventh, nineteen hundred and seventy-five (5/7/1975) and June fourth, nineteen hundred and seventy-six (6/4/1976); and provided, further, that any such person who served in said armed forces during said period and was awarded a service-disconnected disability or a Purple Heart, or who died in said service under conditions other than dishonorable, shall be deemed to be a veteran notwithstanding his failure to complete one hundred and eighty days of active service.

"Lebanese peace keeping force veteran" shall mean any person who performed such wartime service and received a campaign medal for such service during the period commencing August twenty-fifth, nineteen hundred and eighty-two (8/25/1982) and ending when the President of the United States had withdrawn armed forces from the country of Lebanon.

"Grenada rescue mission veteran" shall mean any person who performed such wartime service and received a campaign medal for such service during the period commencing October twenty-fifth, nineteen hundred and eighty-three (10/25/1983) to December fifteenth, nineteen hundred and eighty-three (12/15/1983), inclusive.

"Panamanian intervention force veteran" shall mean any person who performed such wartime service and received a campaign medal for such service during the period commencing December twentieth, nineteen hundred and eighty-nine (12/20/1989) and ending January thirty-first, nineteen hundred and ninety (1/31/1990).

"Persian Gulf veteran" shall mean any person who performed such wartime service during the period commencing August second, nineteen hundred and ninety (8/2/1990) and ending on a date to be determined by presidential proclamation or executive order and concurrent resolution of the Congress of the United States.

"WAAC" shall mean any woman who was discharged and so served in any corps or unit of the United States. Established for the purpose of enabling women to serve with, or as auxiliary to the armed forces of the United States and such women shall be deemed to be of veteran status.

(see continuation of c. 4. s. 7 for persons not deemed to be veterans.)

# Journeyman Part 2 (practical) Examination

The practical examination consists of

20 questions with minimum passing score of 70 percent (14 questions answered correctly). Content:

**Electrical Diagrams** (5 questions)

**Identifying Electrical Materials** (1 question)

**Troubleshooting** (5 questions)

**Identifying Electrical Systems** (5 questions)

**Electrical Installations** (4 questions)

# **Systems Technician Part 2 (practical) Examination**

The practical examination consists of

20 questions with minimum passing score of 70 percent (14 questions answered correctly). Content:

Fire Warning and Security Systems (9 questions)

**Electrical Diagrams** (4 questions)

**Massachusetts Electrical Code** (4 questions)

Massachusetts Licensing Laws (3 questions)

## **Master and Journeyman Examination Content Areas**

The Master Electrician's examination consists of 75 questions while the Journeyman Electrician's examination consists of 60 questions.

Content area	No. of Questions		
M	aster/Journ	eymar	
General Knowledge	0	2	
Requirements for Electrical Installations	1	3	
Electrical/Electronic Fundamentals	7	4	
Services, Feeders and Branch Circuits	10	9	
Grounding and Bonding	7	6	
Conductors and Cables	8	5	
Raceways and Boxes	2	5	
Special Occupancies	4	2	
Special Equipment	9	2	
Special Conditions	2	1	
Motors and Controls	5	4	
Electrical Power & Conditioning Equipm	ent 5	3	
Utilization Equipment	1	1	
Lighting	1	2	
Intrusion Detection and Alarm Systems	4	2	
Fire Detection and Alarm Systems	5	0	

Lightning Protection	4	0
Low Voltage	0	2
Communications Systems	0	1
State Laws & Rules	0	5
Licensing Laws and Rules	0	1

#### **Business and Law Examination Content Areas**

Master Electrician and Systems Contractor candidates are required to take the Business and Law examination. This exam consists of 40 multiple-choice questions that are equally weighted. It is an open-book (manual) exam with allotted time of 3-hours and a required passing score of 70 percent.

Content area	No. of Questions
Licensing	8
Contract Management	7
Estimating and Bidding	4
Safety	4
Financial Management	3
Labor Laws	3
Risk Management	3
Гах Laws	3
Project Management	3
Lien Laws	1
Business Organization	1

# **Systems Contractor and Systems Technician Content Areas**

The Systems Contractor examination consists of 70 questions while the Systems Technician examination consists of 75 questions.

Content area No. of Questions
Contractor Technician

General Knowledge	1	2
Requirements for Electrical Installations	4	3
Electrical/Electronic Fundamentals	4	3
Grounding and Bonding	2	2
Conductors and Cables	8	4
Raceways and Boxes	11	8
Special Occupancies	2	2
Electrical Power and Conditioning	3	1
Low Voltage	3	2
Intrusion Detection and Alarm Systems	7	5
Fire Detection and Alarm Systems	20	14
Elevator Recall	2	1
Cable Supports	1	1
Notification Appliances	2	1
Licensing Laws and Rules	0	1